EAST AFRICAN COMMUNITY

# EDICT OF GOVERNMENT

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EAS 33 (2006) (English): Yoghurt — Specification



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**EAS 33:2006**
ICS 67.100

# EAST AFRICAN STANDARD

## Yoghurt — Specification

## EAST AFRICAN COMMUNITY

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## Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

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# Yoghurt — Specification

## 1 Scope

This East African Standard prescribes the requirements and methods of sampling and test for yoghurt.

## 2 Normative references

The following standards contain provisions, which, through reference in this text constitute provisions of this standard. All standards are subject to revision and parties to agreements based on this standard are encouraged to take steps to ensure the use of the most recent editions of the standard indicated below. Information on currently valid national and international standards may be obtained from the Partner States Bureaux of Standards Information and Documentation Centre.

CAC/RCP 57, *Code of hygiene practice for milk and milk products*

EAS 38, *Labelling of pre-packaged foods*

EAS 68, *Milk and milk products — Methods of microbiological examination*

EAS 161, *Milk and milk products — Sampling — Inspection by attributes — Specification*

EAS 162, *Milk, cream and evaporated milk — Determination of total solids content (Reference method)*

EAS 165, *Milk and milk products — Inspecting sampling — Inspection by variables*

ISO 6785, *Milk and milk products — Detection of Salmonella spp.*

ISO 10560, *Milk and milk products — Detection of Listeria monocytogenes*

ISO 11866, *Milk and milk products — Enumeration of presumptive Escherichia coli*

## 3 Definitions

For the purpose of this East African Standard the following definitions shall apply:

**3.1**
**yoghurt**
cultured milk product obtained by lactic acid fermentation through the action of *Lactobacillus bulgaricus* and *Streptococcus thermophilus*

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**3.2**
**sweetened yoghurt**
yoghurt to which one or more sugars only have been added

**3.3**
**sugar**
any carbohydrate sweetening matter

**3.4**
**plain yoghurt**
yoghurt to which no sugar and food additives have been added

**3.5**
**flavoured yoghurt**
yoghurt to which flavouring foods or other flavouring ingredients have been added

**3.6**
**fruit yoghurt**
yoghurt to which fruits have been added

**3.7**
**heat-treated yoghurt**
yoghurt which has been subjected to heat treatment after fermentation

**3.8**
**pasteurized yoghurt**
yoghurt which has been subjected to pasteurization process (*see* EAS 69) after fermentation

**3.9**
**thermized yoghurt**
yoghurt that is heat-treated at 62 °C to 65 °C for 15 s to 20 s aimed at reducing the number of viable organisms and prolonging shelf-life

**3.10**
**sterilized yoghurt**
yoghurt that is heat-treated at a minimum of 115 °C for 15 s aimed at attaining commercial sterility and prolonged shelf-life

## 4 Essential composition and quality requirements

### 4.1 General requirements

The micro-organisms in the final product shall be viable and abundant except for heat-treated and sterile yoghurts.

### 4.2 Whole milk yoghurt

| | |
|---|---|
| Minimum milk fat content | 3.0 % m/m |
| Minimum milk solids non-fat content | 8.2 % m/m |


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### 4.3 Fat reduced yoghurt

| | |
|---|---|
| Maximum milk fat content | less than 3.0 % m/m |
| Minimum milk fat content | more than 0.5 % m/m |
| Minimum milk solids non-fat content | 8.2 % m/m |

### 4.4 Fat free yoghurt

| | |
|---|---|
| Maximum milk fat content | 0.5 % m/m |
| Minimum milk solids non-fat content | 8.2 % m/m |

### 4.5 Sweetened yoghurt

For sweetened yoghurt the compositional requirements in 4.2, 4.3 and 4.4 shall apply to the milk part of the yoghurt.

### 4.6 Essential raw materials

Yoghurt shall be made from the following essential raw materials:

- pasteurized milk or concentrated milk, or
- pasteurized fat reduced milk or concentrated fat reduced milk, or
- pasteurized fat free milk or concentrated fat free milk,
- pasteurized cream, or
- a mixture of two or more of these products

### 4.7 Essential additions

Cultures of *Lactobacillus bulgaricus* and *Streptococcus thermophilus*

### 4.8 Optional additions

Whole milk powder, skimmed milk powder, unfermented buttermilk, concentrated whey, whey powder, whey proteins, whey protein concentrate, water-soluble milk proteins, edible casein, caseinates, manufactured from pasteurized products.

Cultures of suitable lactic acid producing bacteria in addition to those in 4.7

Sugars (in sweetened yoghurt only).

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# 5 Food additives

## 5.1 Plain yoghurt

None except stabilizers, emulsfiers, thickeners and pH adjusters in Table 2

## 5.2 Other types of yoghurt

### 5.2.1 Flavours

Fruit yoghurt may contain the following flavours:

– essences and extracts derived from fruit or parts of fruit; or

– synthetic equivalents of essences.

Flavoured yoghurt may contain the following flavours

– essences and extracts derived from fruit or parts of fruit; or

– synthetic equivalents of essences.

### 5.2.2 Food colours

Others types of yoghurt may have colours exclusively from substances as a result of carry-over or of vegetable source complying with Table 1.

**Table 1 — Residual colour in fruit/flavoured yoghurt**

| **Name** | **Maximum level,** mg/kg |
|---|---|
| Allura red | 50 |
| Annato | 50 |
| Quinoline yellow | 18 |
| Carmines | 20 |
| Caratenoids | 100 |
| Caramel (ammonium sulphate process) | 150 |
| Sunset yellow | 12 |
| Tatrazine | 27 |
| Indigotine | 6 |
| Coloured ingredients extracted from natural fruit and vegetable source | GMP |


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### 5.2.3 Stabilizers, emulsifiers and thickeners

Yoghurt may contain approved stabilizers, emulsifiers and thickeners which shall be used are listed in Table 2.

**Table 2 — Stabilizers, emulsifiers and thickeners for fruit yoghurt**

| Name | Maximum level mg/kg |
|---|---|
| Alginates | 5/kg |
| Agar | 5/kg |
| Edible gums | 5/kg |
| Celluloses | 5/kg |
| Pectin | 5/kg |
| Gelatin | 10g/kg |
| Starches and modified starches | 10g/kg |

### 5.2.4 Preservatives

Preservatives shall not be added to yoghurt.

Their presence may only be as a result of carry-over effect from flavouring substances and they shall be limited to the residual limits in Table 3.

**Table 3 — Residue preservatives in flavoured yoghurt**

| Name | Maximum level mg/kg |
|---|---|
| Sorbic acid and its sodium, potassium, and calcium salts | 50 |
| Sulphur dioxide and Benzoic acid | Singly or in combination |

### 5.2.5 Artificial sweeteners

Artificial sweeteners are limited to special dietary use only. The approved artificial sweeteners are listed in Table 4.

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**Table 4 — Artificial (non-nutritive) sweeteners**

| Name | Maximum level mg/kg |
|---|---|
| Sorbitol | GMP |
| Acesulfame potassium | 1 000 |
| Alitame | 100 |
| Aspartame | 3 000 |
| Cyclamates (as cyclamic acid) | 250 |
| Saccharin | 100 |
| Sucralose | 400 |

## 6 Hygiene

**6.1** Yoghurt shall be produced, processed and handled in accordance with CAC/RCP 57.

**6.2** When tested in accordance with EAS 68, the products shall not contain micro-organisms exceeding the microbiological quality limits in Table 5 within their shelf-life.

**Table 5 — Microbiological quality limits**

| Micro-organisms | Maximum limits per mL |
|---|---|
| E. Coli | Absent |
| Salmonella spp | Negative in 25 mL |
| Moulds and yeasts | 10 |
| Staphylococcus aureus | Negative in 25 mL |

## 7 Contaminants

The products covered by this standard shall comply with the maximum limits for contaminants and the maximum residue limits for pesticides and veterinary drugs established by the Codex Alimentarius Commission.

## 8 Packaging

**8.1** Yoghurt shall be packaged in food grade materials that are non-toxic and inert to yoghurt.

**8.2** The packaging material or containers shall be well sealed to protect the contents during storage.


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## 9 Labelling

In addition to the requirements of EAS 38, the following specific provisions apply:

### 9.1 The name of the product

**9.1.1** The name of the product shall be declared in accordance with the categories defined in Clause 3 subject to the following provisions:

**9.1.1.1** Yoghurt with not less than 3.0 % m/m milk fat content shall be designated as whole milk yoghurt.

**9.1.1.2** For yoghurt with less than 3.0 % m/m milk fat but with more than 0.5 % m/m milk fat the designation shall include fat reduced. Yoghurt with no more than 0.5 % m/m milk fat shall be designated as fat free. Accompanying the name of the food shall be a milk fat statement in multiples of 0.5 % e.g. 1.0 %, 1.5 %, 2.0 % etc. whichever is closest to the actual milk fat content of the yoghurt.

**9.1.2** The provisions given in 9.1.1.1 and 9.1.1.2 apply also to yoghurt to which sugar or sugars have been added as defined in 3.2, with the provision that the designations concerned shall be accompanied by the term "Sweetened".

**9.1.3** Where milk other than cow's milk is used for the manufacture of yoghurt or any part thereof, a word or words denoting the animal or animals from which the milk has been derived shall be inserted immediately before or after the designation of the product.

### 9.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion.

### 9.3 Net contents

The net contents shall be declared by volume or mass in SI units.

### 9.4 Name and address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor, shall be declared.

### 9.5 Country of origin

The country of origin of the yoghurt shall be declared.

### 9.6 Date of manufacture

There shall be an indication of the date of production, that is, the date the final product was packaged for final sale.

### 9.7 Date of expiry

The date of expiry shall be indicated

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### 9.8 Storage instructions

The manufacturer shall indicate instructions for storage.

### 9.9 Lot identification

Each container shall be indelibly and legibly marked to identify the producing factory and the lot.

## 10 Fill of container

The fill of the container shall be in accordance with the regulations of the Department of Weights and Measures. The yoghurt shall occupy not less than 90 % v/v of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20 °C, which the sealed container will hold when completely filled.


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